

## REMARKS

The Applicants have carefully considered this application in connection with the Examiner's Action and respectfully request reconsideration of this application in view of the foregoing amendment and the following remarks.

The Applicants originally submitted Claims 1-20 in the Application. The Applicants have amended independent Claims 1, 8 and 15 in the present Amendment. Accordingly, Claims 1-20 are currently pending in the Application.

### **I. Rejection of Claims 1-20 under 35 U.S.C. §103**

The Examiner has rejected Claims 1-4, 6-11, 13-18 and 20 under 35 U.S.C. §103(a) as being unpatentable over U.S. Publication No. 2002/0085578 to Dell, *et al.* ("Dell") in view of U.S. Publication No. 2001/0050916 to Krishna, *et al.* ("Krishna"). The Examiner has rejected Claims 5, 12 and 19 under 35 U.S.C. §103(a) as being unpatentable over Dell in view Krishna in further view of U.S. Patent No. 6,975,638 to Chen, *et al.* ("Chen").

Claim 1 is generally directed to a non-blocking crossbar. The non-blocking crossbar comprises  $n$  inputs,  $n$  numbering at least two. The non-blocking crossbar further comprises  $n$  outputs, each of the outputs having a destination first-in, first-out buffer (FIFO) and  $n$  crossbar FIFOs interposing corresponding ones of the  $n$  inputs and said destination FIFO. The non-blocking crossbar also comprises a scheduler configured to cause a plurality of packets *that are of differing lengths* to be transmitted from one of said inputs toward one of the outputs only when both said destination FIFO associated therewith and an interposing one of the crossbar FIFOs have sufficient memory to contain an entirety of a packet of the plurality of packets. (Emphasis added).

As discussed in the previous Amendment for the above Application, filed June 7, 2006, Dell is directed a switching stage that employs crossbar devices. (Page 2, paragraph 0013). In Dell, the “switch fabric of the present invention is a cell-switching engine handling *fixed-sized* switching cells.” (Page 6, paragraph 0090). Dell uses one or more crossbars to achieve scalability in self-routing of cells. (Page 2, paragraph 0012). Krishna is also directed to cell switching. (Abstract). Chang is directed to interleaved weighted fair data packet queue sentencing. (Abstract).

As discussed in the previous Amendment, in Dell, “[a] switching cell has a header and a payload. The payload size is programmable... The term ‘programmable’ implies that ... the particular payload size is selected when the fabric switch is initially configured. Once the switch fabric is configured, the payload size remains *fixed* for all subsequent switch fabric operations.” (Page 6, paragraph 0090; emphasis added).

In the “Response to Arguments” section of the present Examiner’s Action, the Examiner states:

It is argued [by the Applicants in the Amendment of June 7, 2006] that the Applicant’s invention is directed toward a crossbar that forwards packets of different lengths based on memory available in the FIFOs of the crossbar; however, the claims currently do not limit the packets to be of different or variable lengths. As pointed out in Applicant’s arguments, Dell *et al.* discloses a cell with a payload size that is programmable, meaning the cell is one of a plurality of lengths, as claimed... While Dell *et al.* may not teach forwarding cells of the variable lengths within the crossbar, since the claims currently do not limit the forwarded packets to be of a variable or different lengths, these arguments are moot. It is recommended that the claims be amended such that they clearly limit the crossbar to forwarding the variable length packets, of which, at least two have different lengths.

In order to help expedite prosecution, the Applicants amend independent Claim 1, Claim 8 and Claim 15 to bring these claims into substantial conformity with the suggestions of the Examiner.

Dell, individually or in combination with Krishna, fails to teach or suggest the invention recited in independent Claims 1, 8, and 15 and their dependent claims, when considered as a whole. Claims 1-20 are therefore not obvious in view of Dell, Krishna and Chen.

The Applicants state that the cited references do not support the Examiner's rejection of Claims 1-20 under 35 U.S.C. §103(a). The Applicants therefore respectfully request the Examiner withdraw the rejection.

## II. Conclusion

In view of the foregoing amendment and remarks, the Applicants now see all of the Claims currently pending in this Application to be in condition for allowance and therefore earnestly solicit a Notice of Allowance for Claims 1-20. Applicants, however, reserve the right to traverse arguments or characterizations in the present Examiner's Action that are not specifically addresses in the present Amendment.

The Applicants request the Examiner to telephone the undersigned attorney of record at (972) 480-8800 if such would further or expedite the prosecution of the present Application. The Commissioner is hereby authorized to charge any fees, credits or overpayments to Deposit Account 08-2395.

Respectfully submitted,

HITT GAINES, P.C.

A handwritten signature in black ink, appearing to read 'D. Hitt', is written over a circular stamp or mark.

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Date: 11/27/06

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